THORTON et al. Appl. No. 10/594,121 December 1, 2008

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) A process for gelatinising starch and/or a starch derivative by subjecting starch and/or a starch derivative in the presence of a carbohydrate polymer of synthetic polymer to a thermo mechanical treatment, which carbohydrate polymer or synthetic comprises aldehyde containing monomer units, whereby at least 1 % of the aldehyde containing monomer units comprise one or more aldehyde group per monomer unit which one or more aldehyde groups are group is derived from one or morea primary alcohol groups group.
- 2. (Currently Amended) A process according to claim 1, wherein the one or more aldehyde groups are group is derived from one or morea primary alcohol groups group at the C-6 position.
- 3. (Currently Amended) A process according to claim 1 or 2, wherein 1-50 % of the aldehyde containing monomer units comprise one or more aldehyde groups group per monomer unit.
- 4. (Currently Amended) A process according to claim 3, wherein 1-20 % of the aldehyde containing monomer units comprise one or more aldehyde groups group per monomer unit.

THORTON et al. Appl. No. 10/594,121² December 1; 2008 ³

- 5. (Currently Amended) A process according to any one of claims 1-4claim 1, wherein the aldehyde containing monomer units in the carbohydrate polymer comprise in addition a cleaved vicinal diol system.
- 6. (Currently Amended) A process according to any one of claims 1–5claim 1, wherein the carbohydrate polymer comprises a-1,4-glucans (the "starch family"), β -1, 4-glucans (cellulose), glucomannans and galactomannans (guar and locust bean gum), arabinoxylans and xylans (hemicellulose) and β -2, 1 and β -2,6-fructans (inulin and levan).
- 7. (Original) A process according to claim 6, wherein the carbohydrate polymer comprises starch, cellulose, fructans, hemi-cellulose, and/or galactomannans.
- 8. (Previously Presented) A process according to claim 1, wherein the one aldehyde group is introduced in the monomer unit by means of protected aldehydes (acetals) or substituted unsaturated functionalities followed by oxidation of through hindered nitroxyl mediated oxidation.
 - 9. (Canceled).
- 10. (Previously Presented) A process according to claim 1, wherein the thermo mechanical treatment is carried out at a temperature in the range of from 80-130°C.

THORTON et al. Appl. No. 10/594,121 December 1, 2008

- 11. (Previously Presented) A process according to claim 1, wherein the thermo mechanical treatment is carried out continuously.
- 12. (Currently Amended) A granulate of thermoplastic starch that comprises a carbohydrate polymer or a synthetic polymer in an amount in the range of from 3 to 75 weight %, based on total thermoplastic starch, a polyol or urea as plasticerplasticizer and water, which carbohydrate polymer or synthetic polymer comprises aldehyde containing monomer units, whereby at least 1 % of the aldehyde containing units comprise one or more aldehyde groupsgroup per monomer unit which one or more aldehyde groups are group is derived from one or morea primary alcohol groupsgroup.
- 13. (Currently Amended) A shaped starch product that comprises

 thermolplastic thermoplastic starch and a carbohydrate polymer-or a synthetic polymer, wherein
 the carbohydrate polymer or synthetic polymer is present in an amount in the range of from 3 to
 75 weight %, based on total thermoplastic starch, a polyol or urea as plasticerplasticizer and
 water, which carbohydrate polymer or synthetic polymer-comprises aldehyde containing
 monomer units, whereby at least 1% of the aldehyde containing units comprise one or more
 aldehyde groupsgroup per monomer unit which one or more aldehyde groups are group is derived
 from one or morea primary alcohol groupsgroup.
- 14. (Currently Amended) A blown starch film that comprises a thermoplastic starch and a carbohydrate polymer or a synthetic polymer, wherein the carbohydrate polymer or synthetic polymer is present in an amount in the range of from 3 to 75 weight %, based on total

THORTON et al. Appl. No. 10/594,121 December 1, 2008

thermoplastic starch, a polyol or urea as plasticerplasticizer and water, which carbohydrate polymer or synthetic polymer comprises aldehyde containing monomer units, whereby at least 1% of the aldehyde containing units comprise one or more aldehyde groups group per monomer unit which one or more aldehyde groups are group is derived from one or more a primary alcohol groups group.

- 15. (Currently Amended) A starch or starch product granulate of thermoplastic starch according to claim 12 comprising in addition a polyester.
- 16. (Currently Amended) A food product that comprises a food component and a carbohydrate polymer-or a synthetic polymer, which carbohydrate polymer or synthetic polymer comprises aldehyde containing monomer units, whereby at least 1 % of the aldehyde containing monomer units comprise one or more aldehyde groupsgroup per monomer unit which one or more aldehyde groups are group is derived from one or more a primary alcohol groups group.
- 17. (New) A shaped starch product according to claim 13, comprising in addition a polyester.
 - 18. (New) A blown starch film according to claim 14, comprising in addition a polyester.
- 19. (New) A process according to claim 1, wherein the thermo mechanical treatment is an extrusion.